

Diskops Version 6 - Instructions

Diskops 6 has been released into the public domain as a separate patch and also already patched with the DSE Editor Assembler. The later filename is "EDIT-AS7".

Diskops 6 provides an additional 9 direct commands to the Editor Assembler providing Disk Support whilst retaining the existing Tape Support. The Additional Commands are as follows:-

1. **LOAD:FILENAME** - Load a Source File From Disk.
2. **SAVE:FILENAME** - Save a Source File to Disk.
3. **BSAVE:FILENAME** - Save te Object File To Disk.

Note:

- Only the First 8 Characters of the Filename are recognised.
- Source Files are of type W.
- Object Files are of type B.
- If a Disk Error occurs, then Diskops BASIC will be entered.
- All of the above commands assume Drive 1.

4. **LINK:FILENAME**

This Command allows a programmer to chain source modules together allowing function calls across modules. This is done by the use of a global symbol Table stored in Bank 2 (I Think).

FILENAME specifies the first file in the chain. ALL Source Modules are assumed to be on a Disk in Drive 1.

An Object File is created for each source module in the chain. The filename is the same except that the last two characters in the name are ".O". All Object files are of type B and are saved to a disk in Drive 2.

5. **RTRY**

If a disk error occurs during linking, the **RTRY** command can be used to re-attempt the last operation. This depends upon the error and at which point it occurs.

6. **VER**

This displays the version of Diskops which is patched into the Editor Assembler.

7. **TABLE**

This allows the programmer to look at the symbol table created when a program is assembled. The symbol table contains the names and values of all labels in the source listing. The output is in the following format:-

Label (1 - 4 Chars)	Decimal Value	Hex Value
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If the "C" parameter is set, the table output is echoed to the printer. To puase the table output press "H", to continue press "C" and to exit press break.

8. **GTABLE**

This does the same as the TABLE command excepts that it outputs the Global Symbol table created during the last Link command.

9. **BASIC**

This enters Diskops BASIC (see below).

Special Commands embedded in Source

Special Commands can be embedded in each source module. The Syntax of these commands is `;/command`. This means that the A command will treat them as comment lines. The Special Commands are as follows:

;/ORG=address (eg. 7AE9H or 31465)

This sets the origin of the current module. If this command is not specified the current origin is used.

;/ADDR=address

This sets the start address of the object file associated with the current source module. This means that an object file can be assembled with an origin different to its starting address. This allows for run-time relocation of code. This is useful when you want to ship one file on a disk which contains code that is to be eventually placed into bank switched memory.

For Example: I use this for QWII when the origin is set to 0C000H but the load address is 9000H.

Note:

- If the ADDR command is not specified then the address of the Object file will be the same as the current origin.
- The above two commands must be placed in every source module (where necessary) before the first command-line, they can be amongst comment lines.

;/LINK:FILENAME

This specifies the next file in the chain. It **MUST** be the last line in the source module. If not or omitted then it is assumed that the source module is the last in the chain.

;/TURN:FILENAME

This is the same as the **;/LINK** command except that the linking process will pause allowing the programmer to “turn” or change the source disk in Drive 1. If this command is used at any time during the link process, then there will be an additional pause before commencing the 2nd pass over the source disk. This allows the original source disk to be placed into Drive 1.

;/LABEL

IMMEDIATELY prior to the **;/LINK** or **;/TURN** command, external (or global) labels can be specified. For each external label specified a corresponding Label EQU 12345 must be present. The value must be 5 BYTES ONLY. I normally set all external labels to 31488. The EQU list must be after ALL comment lines (including **;/ORG** and **;/ADDR** commands).

Diskops BASIC Version 1.1

There are 9 disk BASIC commands allowed. These are DIR, STATUS, INIT, REN, ERA, EXA, DIS, REL and CHA.

The first 5 of these commands have the same syntax as their “BASIC” equivalents. The last four commands are equivalent to those in the EXT12 Disk Utility.

To return to the Editor Assembler, type **ASS**. The Source will have been retained.